

## Frequently Asked Questions

## Yakima Ground Water Study

What is ground water?

**A:** Ground water is defined as water that exists below the land surface, or beneath the bed of any surface water body, such as a lake or river. The connection between ground water and surface water (hydraulic continuity) varies from site to site, depending on the underlying geologic foundation.

Why is a ground water study needed in the Yakima River Basin?

State, federal and tribal water managers recognize that more scientific data is needed to describe the relationship between water found in underground aquifers and the water running in rivers and streams in the Yakima River Basin. A judge is deciding surface water rights in the Yakima River Basin, and most surface water is already appropriated. Additional information is needed to estimate what impact ground water withdrawals have on surface water supplies if sound water management decisions are to be made:

- To protect senior water right holders;
- To assure enough water in the river for fish migration, spawning and rearing;
- To decide whether to allocate water requested in 1,000-plus state water right applications pending before Ecology.

Who is conducting the study?

The study will be conducted by the United States Geological Survey (USGS), with participation from the Washington State Department of Ecology (Ecology), United States Bureau of Reclamation (USBR) and the Yakama Nation. USGS, Ecology and USBR will fund the \$6 million study.

**O**: What counties in Washington will be affected by the study?

**A**: Kittitas, Yakima and part of Benton County will be included in the study.

How will data from the study be used?

The study will "model" how much, when and where ground water withdrawals affect surface water supplies. It will provide a common technical platform and the valid scientific data needed to simulate ground water flow within the Yakima River Basin. Study results will help water managers to estimate the potential impact each ground water withdrawal application might have on surface water supplies. One scenario will describe what impact ground water well applications now before the

State Department of Ecology would have on the river. The model would also allow water managers to analyze ways applicants may compensate for the impacts of water withdrawals to protect stream flows.

**Q:** Will water right decisions be made while the study is under way?

A: Ecology, USBR and YN have agreed to manage water conservatively in the Yakima River Basin until the study is complete. Ecology will propose a regulation that would curtail new water allocation decisions until study results are available. The new rule would undergo public review and comment before adoption. Exceptions to the water allocation curtailment could include:

- transfers and changes to existing rights;
- public health and safety emergencies;
- domestic water use from exempt wells.
- **Q:** How would study results protect existing water rights?
- A: New water allocations place a greater demand on a resource that, in some years, is already inadequate to meet existing water right needs. If the study indicates that ground water contributions to the Yakima River system are needed to meet existing right holders' needs, then no new water would be allocated without a plan for offsetting the impact of additional ground water withdrawals.
- **Q:** Will people be prevented from drilling wells while the study is under way?
- A: Not necessarily. Wells constructed for exempt domestic use, associated with transfers and changes of existing rights, or for public health and safety emergencies could be excepted from the water allocation curtailment. If so, then wells to provide water for those uses would be allowed.

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